Table 1

Age distribution among the studied groups

	Age in years			
	Group1 A	**Group1 B**	**Group1 C**	**Group2**
Range	1-13	5 – 17	7 - 16	1-17
Mean	7	11	11.5	9
± SD	6	6	9	8
t. test	1.60			
P. value	0.117			

Table(1) showed that there is no statistically significant in age distribution among the studied groups .

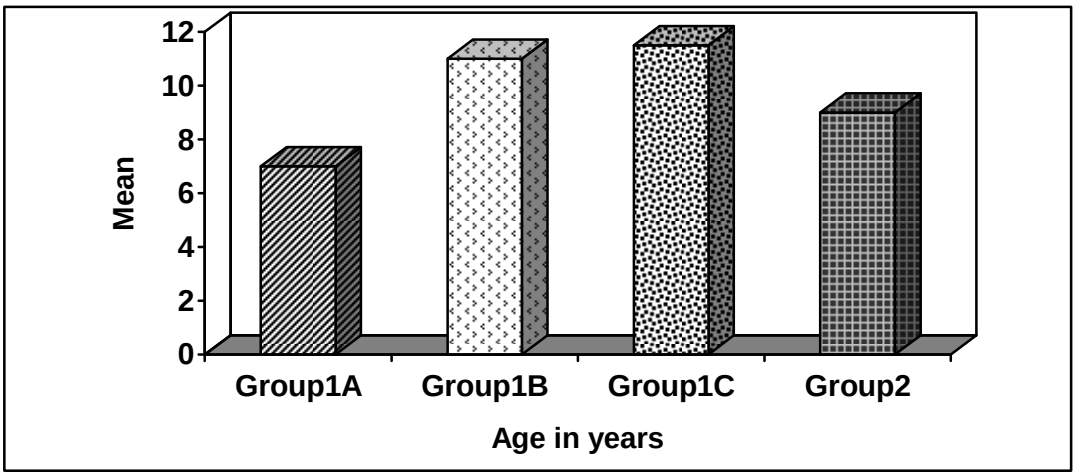

Fig (1) : Age distribution among the studied groups

Table 2

Sex distribution among the studied groups

	Sex			
	Group1 A	**Group1 B**	**Group1 C**	**Group2**
Male	6	7	5	17
Female	2	6	4	13

Table(2) showed that there is no statistically significant in sex distribution among the studied groups.

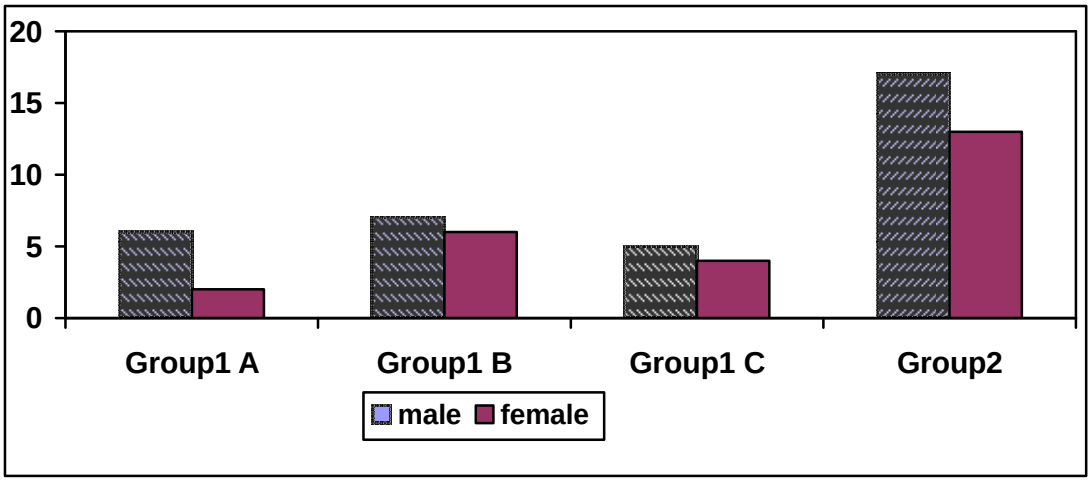

Fig (2) Sex distribution among the studied groups

Table 3

Bilirubin among the studied groups

	BILIRUBIN mg/dl			
	Group1 A	**Group1 B**	**Group1 C**	**Group2**
Range	2.5-3.7	4.9-7.7	7.8-10.4	0-1.2
Mean	3.1	5.8	9.1	1.2
± SD	0.6	1.9	1.3	1.2
t. test	0.986			
P. value	<0.05*			

Table (3) showed statistically significant increase in serum bilirubin in the studied groups than that of control group .

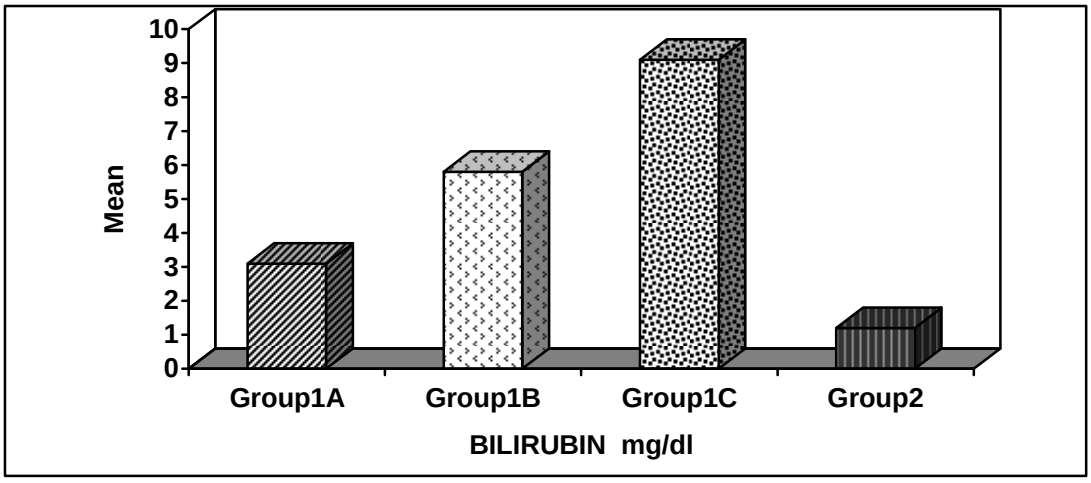

Fig (3) Bilirubin among the studied groups

Table 4

Serum albumin g/dl among the studied groups:

	Serum albumin g/dl			
	Group1 A	**Group1 B**	**Group1 C**	**Group2**
Range	2.8-4.2	2.65-3.15	1.5-2.3	3.5-5
Mean	3.5	2.9	1.9	4.25
± SD	0.7	0.25	0.4	1.5
F. test	3.894			
P. value	<0.05*			

Table (4) showed that serum albumin in the studied groups was statistically significant decreased than that of control group .

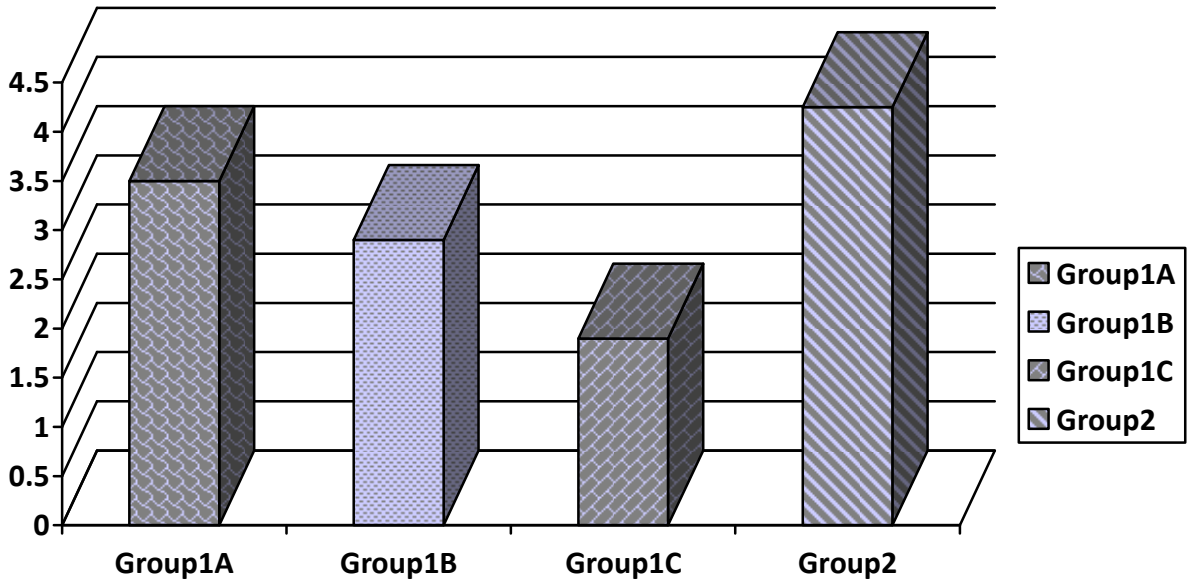

Fig (4) Serum albumin among the studied groups

Table 5

Prothrombin time among the studied groups:

	Prothrombin time (seconds prolonged)			
	Group1 A	**Group1 B**	**Group1 C**	**Group2**
Range	12.9-13.5	14.8-21	16-21	10-14
Mean	13.2	17.9	18.5	12
± SD	0.3	3.1	2.5	4
t. test	4.356			
P. value	<0.05*			

Table (5) showed that prothrombin time among the studied groups was statistically significant more prolonged than that of control group.

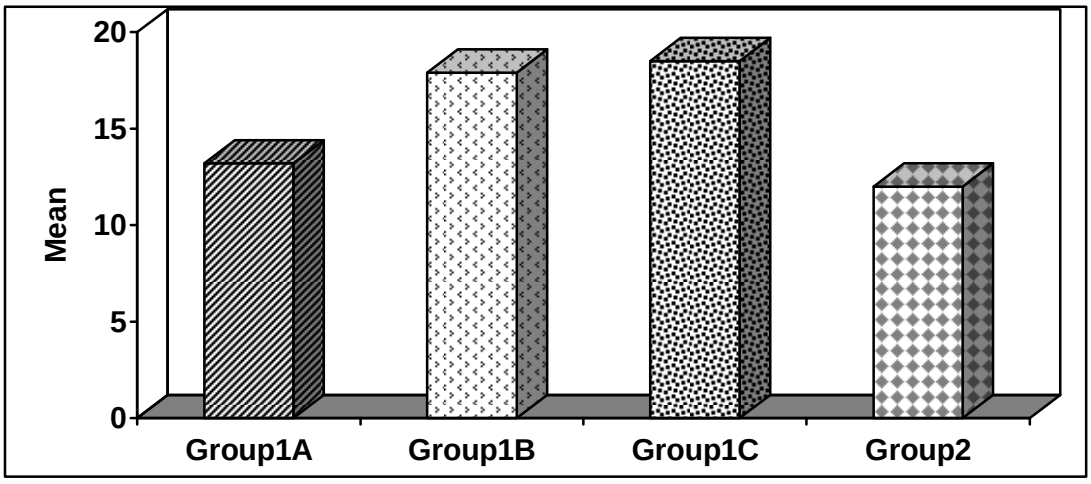

Fig (5) Prothrombin time among the studied groups

Table 6

AST(IU) among the studied groups:

	AST(IU)			
	Group1 A	**Group1 B**	**Group1 C**	**Group2**
Range	39-79	258-132	47-163	5-40
Mean	58	95	105	22.5
± SD	21	37	58	35
t. test	3.894			
P. value	>0.05			

Table (6) showed that AST among the studied groups was statistically non significant increase than that of control group.

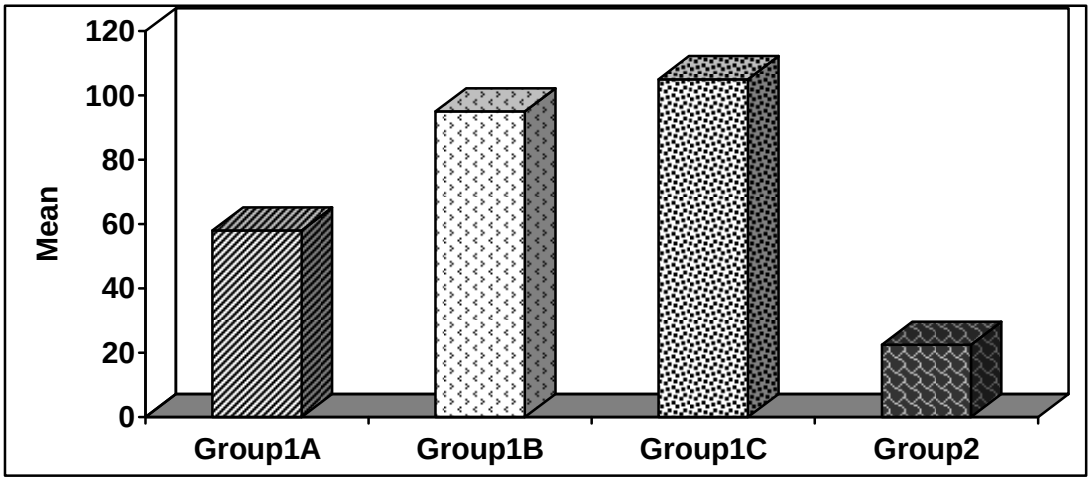

Fig (6) AST(IU) among the studied groups

Table 7

ALT(IU) among the studied groups:

	ALT(IU)			
	Group1 A	**Group1 B**	**Group1 C**	**Group2**
Range	58-114	58-126	54-150	7-56
Mean	85	92	102	31.5
± SD	29	34	48	49
t. test	4.356			
P. value	>0.05			

Table (7) showed ALT among the studied groups was statistically non significant increased than that of control group.

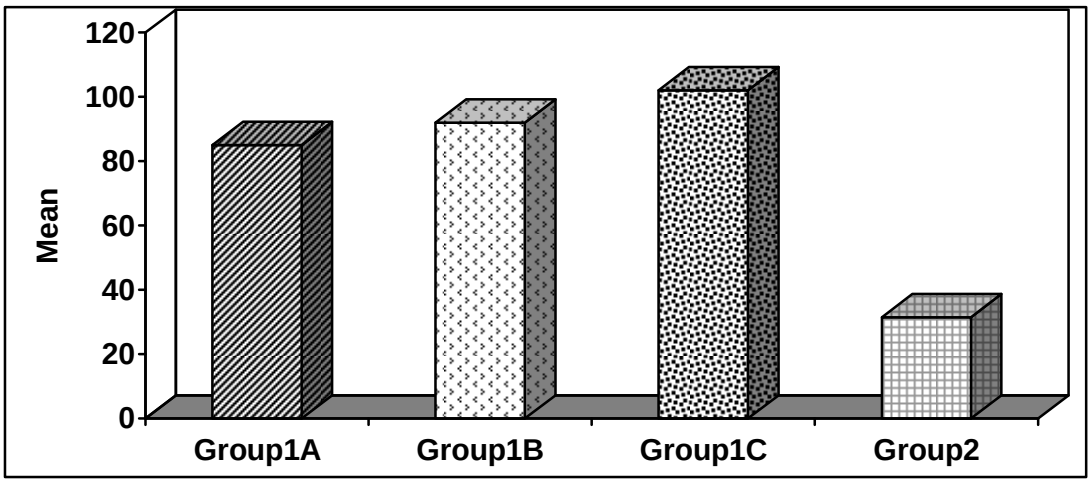

Fig (7) ALT(IU) among the studied groups

Table 8

Serum Creatinine(mg/dl) among the studied groups:

	Serum Creatinine(mg/dl)			
	Group1 A	**Group1 B**	**Group1 C**	**Group 2**
Range	0.5-0.9	0.3-0.9	0.7-1.1	0.6-1.7
Mean	0.7	0.6	0.9	1.15
± SD	0.2	0.3	0.2	1.1
t. test	3.263			
P. value	0.117			

Table (8) showed serum creatinine(mg/dl) among the studied groups that was not significant in our study as all results were within the normal range.

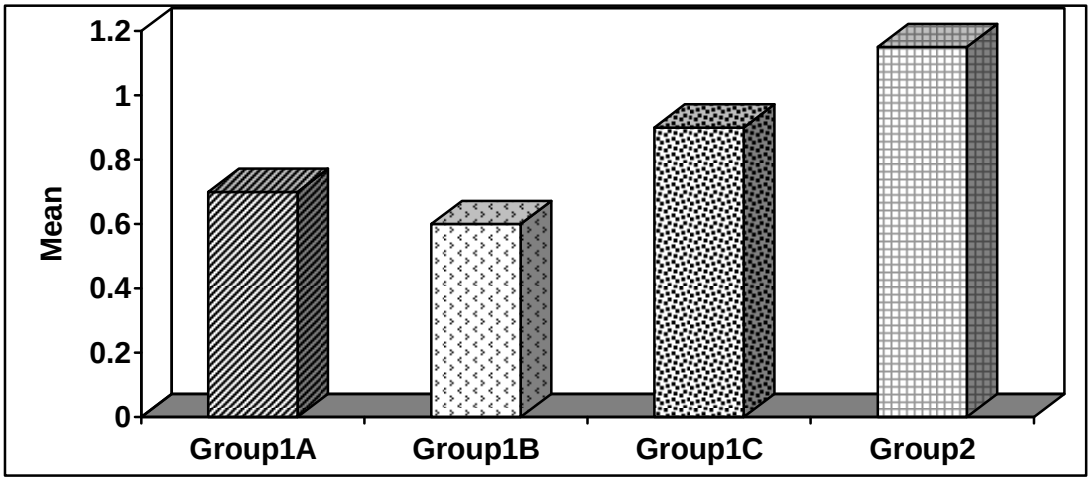

Fig (8) Serum Creatinine(mg/dl) among the studied groups

Table 9

Serum aldosterone (pg/dl) among the studied groups:

	Serum aldosterone (pg/dl)			
	Group1 A	**Group1 B**	**Group1 C**	**Group2**
Range	64-148	82-208	101-347	58-150
Mean	106	145	224	104
± SD	82	126	246	92
t. test	10.393			
P. value	<0.05*			

Table (9) showed serum aldosterone (pg/dl) among the studied groups that was statistically significant increased in group1B and C more than that of control group and was not increased in group1 A.

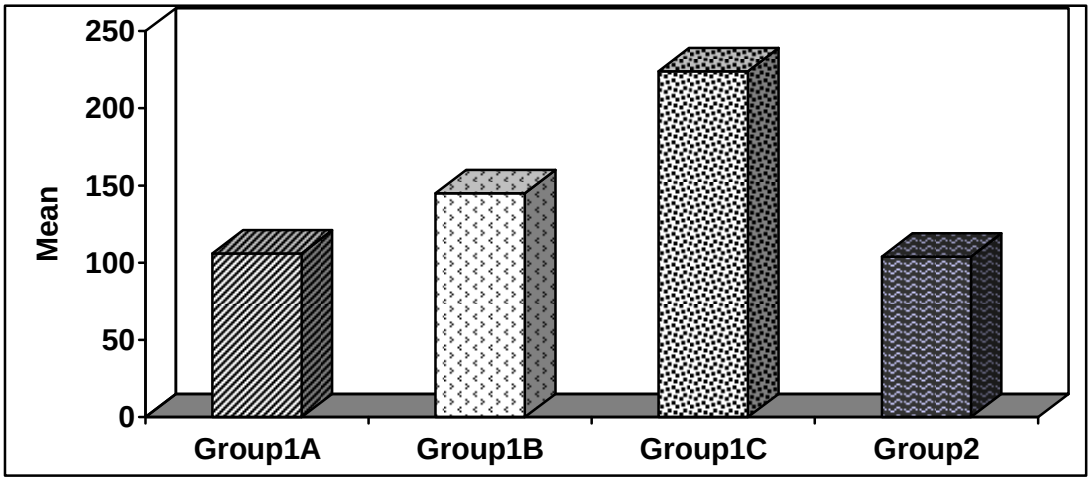

Fig (9) Serum aldosterone (pg/dl) among the studied groups

Table 10

Resistive index in group1A and group2

	Resistive index	
	Group1 A	**Group2**
Range	0.56-0.6	0.32-0.4
Mean	0.58	0.36
± SD	0.02	0.08
F. test	6.025	
p. value	>0.05	

Table (10) showed that Resistive index in group1A was statistically non significant increased than that of the control group.

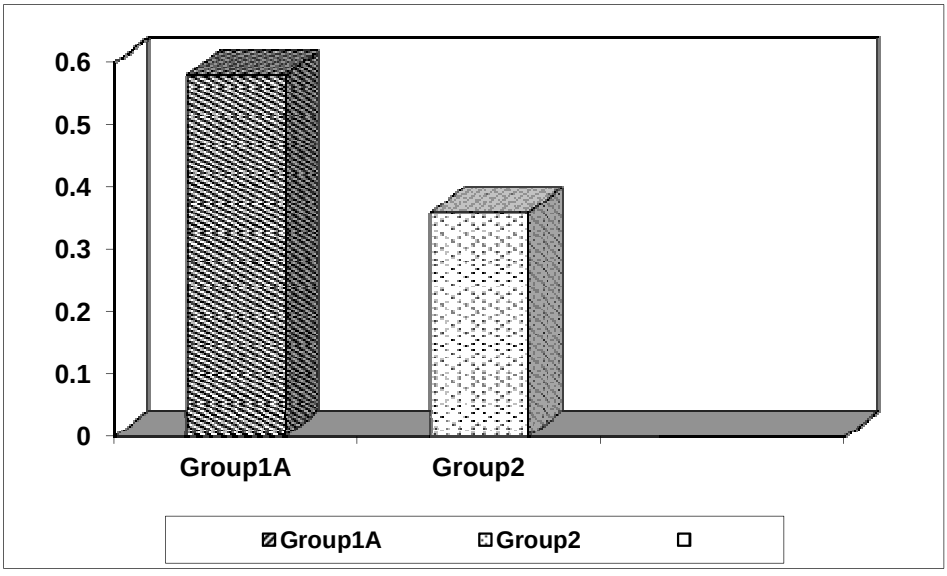

Fig (10) Resistive index in group1A and group2

Table 11

	Resistive index	
	Group1 B	**Group2**
Range	0.59-0.75	0.32-0.4
Mean	0.67	0.36
± SD	0.08	0.08
F. test	6.025	
p. value	<0.05*	

Resistive index in group1B and group2

Table (11) showed that Resistive index in group1B was statistically significant increased than that of the control group.

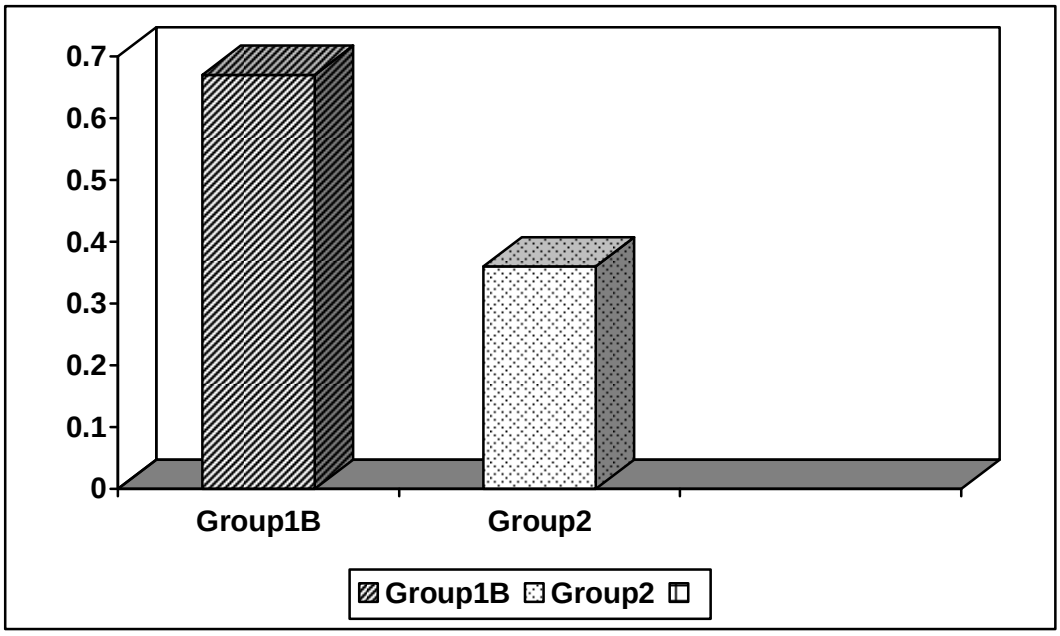

Fig (11) Resistive index in group1B and group2

Table 12

	Resistive index	
	Group1 C	**Group2**
Range	0.75-0.83	0.32-0.4
Mean	0.79	0.36
± SD	0.04	0.08
F. test	4.265	
p. value	<0.001*	

Resistive index in group1C and group2

Table (12) showed that Resistive index in group1Cwas highly statistically significant increased than that of the control group.

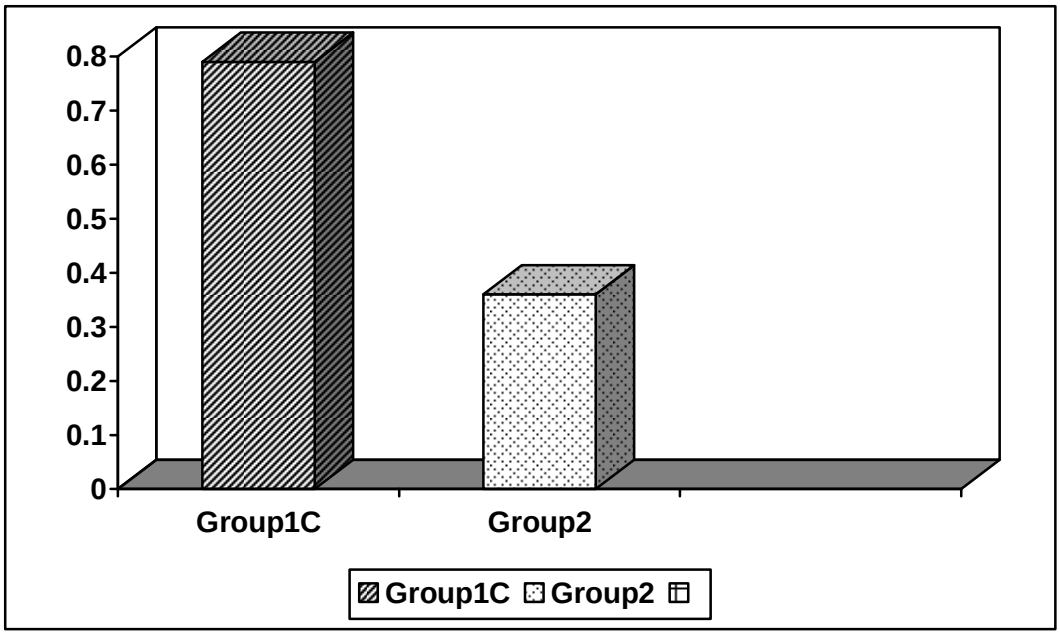

Fig (12) Resistive index in group1C and group2

Table 13

Pulsetality index in group1A and group2

	pulsetality index	
	Group1 A	**Group2**
Range	0.62-0.72	0.34-0.6
Mean	0.68	0.47
± SD	0.06	0.16
F. test	3.125	
p. value	>0.05	

Table (13) showed Pulsetality index in group 1A that was statistically non significant increased than control group.

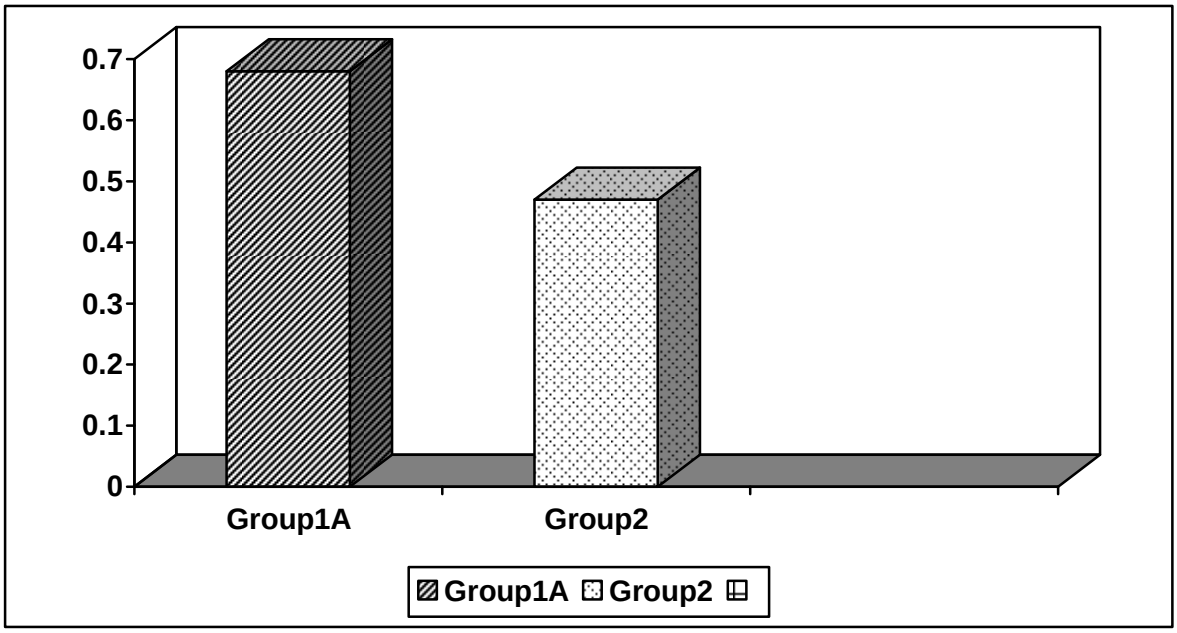

Fig (13) pulsetality index in group1A and group2

Table 14

Pulsetality index in group1B and group2

	pulsetality index	
	Group1 B	**Group2**
Range	0.88-1.36	0.34-0.6
Mean	1.12	0.47
± SD	0.24	0.16
F. test	3.125	
p. value	<0.05*	

Table (14) showed Pulsetality index in group 1B that was statistically significant increased than control group.

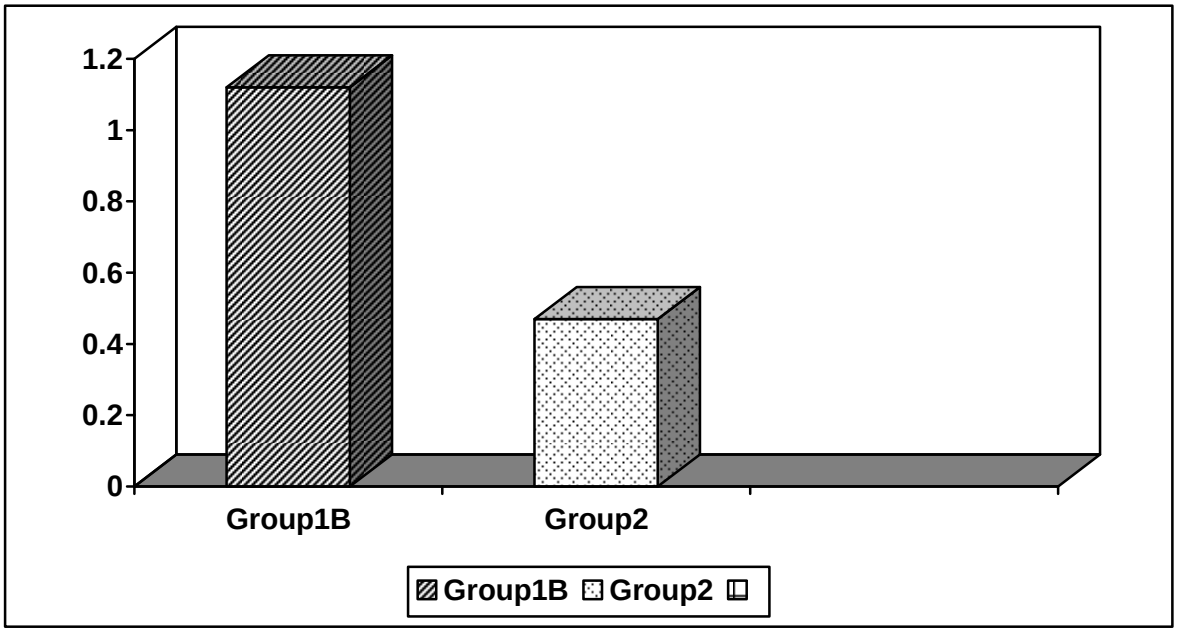

Fig (14) pulsetality index in group1B and group2

Table 15

Pulsetality index in group1C and group2

	pulsetality index	
	Group1 C	**Group2**
Range	1.34-2.18	0.34-0.6
Mean	1.76	0.47
± SD	0.42	0.16
F. test	3.125	
p. value	<0.001*	

Table (15) showed Pulsetality index in group 1Cthat was statistically highly significant increased than control group.

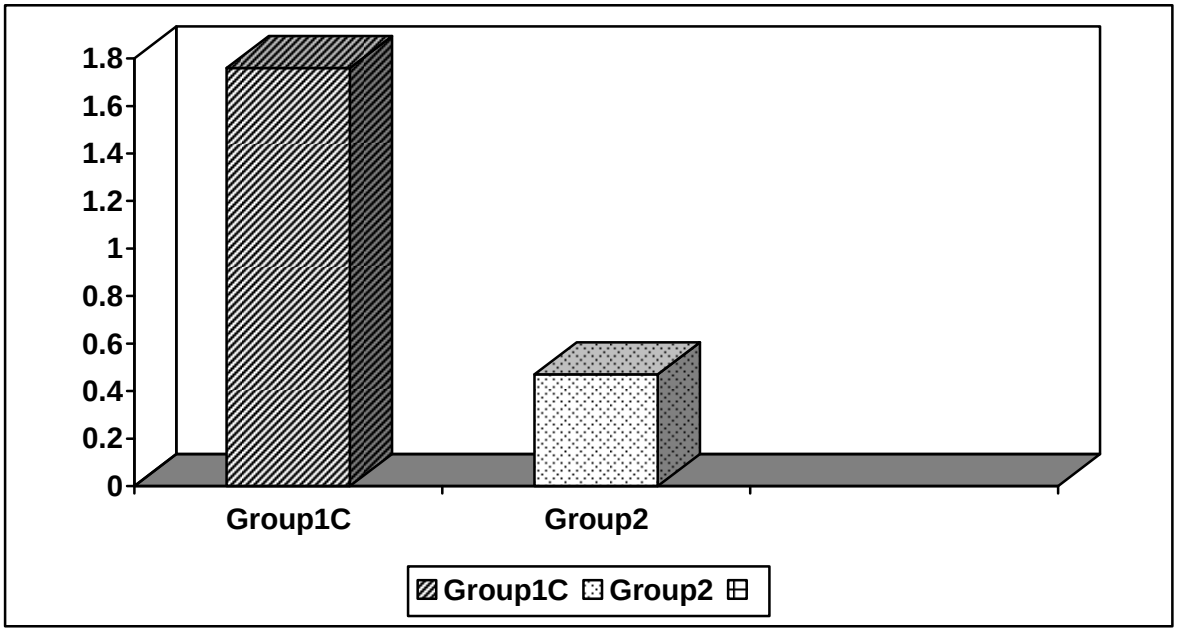

Fig (15) pulsetality index in group1C and group2

Table (16)

Comparison between the pulsetality index (PI) and resistive index (RI) in all groups of chronic liver diseases and the control group.

Groups	PI	RI
Group1 A	0.68 ± 0.06*	0.58 ± 0.02*
Group1 B	1.12 ± 0.24*	0.67 ± 0.08*
Group1 C	1.76 ± 0.42*	0.79 ± 0.04*
Group2	0.47 ± 0.05	0.36 ± 0.04
F. test	3.125	4.265
p. value	<0.001*	<0.05*

*****Significance from the control group.

According to this comparison we conclude that PI is more significant than RI.

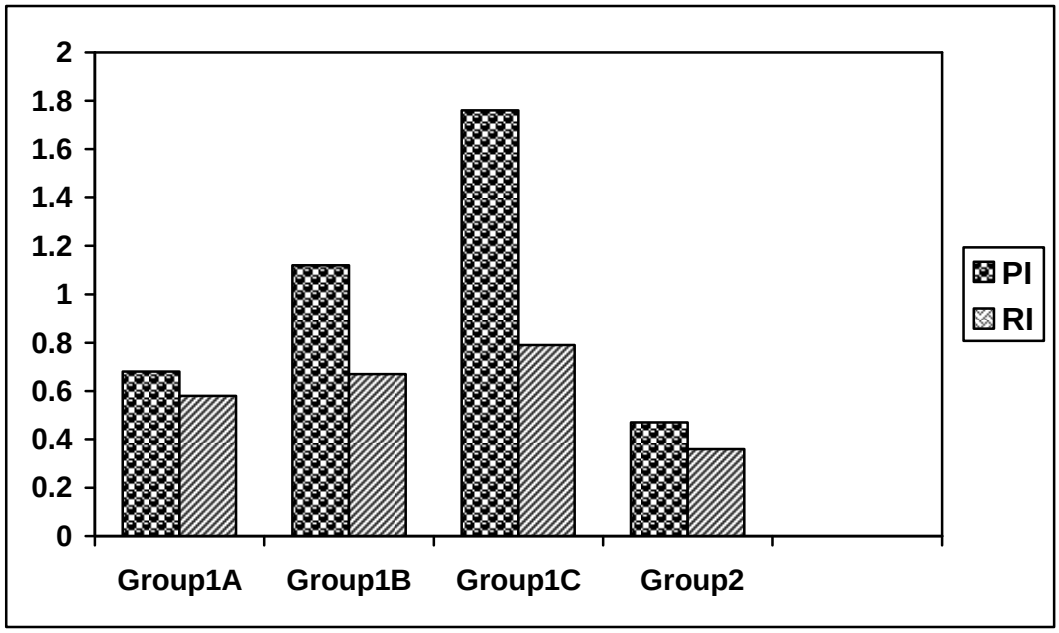

Fig (16) Comparison of the pulsetality index (PI) and resistive index (RI) between all groups of chronic liver diseases and the control group.